PTO/SB/08B (07-05) Approved for use through 07/31/2008. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduc sons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known Substitute for form 1449/PTO 09/780,179 **Application Number** THIRD SUPPLEMENTAL Filing Date February 9, 2001 INFORMATION DISCLOSURE Thomas J. QUIGLEY First Named Inventor STATEMENT BY APPLICANT Art Unit 2661 (Use as many sheets as necessary) **Examiner Name** Ian N. Moore Attorney Docket Number 1875.132000I Sheet of NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of Examiner Cite No.1 the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume issue Initials\* number(s), publisher, city and/or country where published INM Quigley, T.J. et al., U.S. Patent Appl. No. 09/714,713, filed November 16, 2000, entitled NPL1 "Data Packet Fragmentation in a Cable Modem System". Quigley, T.J. et al., U.S. Patent Appl. No. 09/710,238, filed November 9, 2000, entitled INM "Pre-Equilization Technique For Upstream Communication Between Cable Modern And NPL2 Headend". Quigley, T.J. et al., U.S. Patent Appl. No. 11/292,098, filed December 2, 2005, entitled INM NPL3 "Data Packet Fragmentation in a Cable Modem System". Declaration of Lisa V. Denney, dated March 22, 2004, (7 pages), with Exhibits 1-4. INM NPL4 Declaration of Lisa V. Denney, dated March 22, 2004, (8 pages), with Exhibits 1-5. INM NPL5 NPL6 NPL7 NPL8 NPL9 NPL10

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SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

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of

Complete if Known				
Application Number	09/780,179			
Filing Date	February 9, 2001			
First Named Inventor	Thomas J. QUIGLEY			
Art Unit	2661			
Examiner Name	Ian N. Moore			
Attorney Docket Number	1875.132000I			

Examiner	Cite No. <sup>1</sup>		Publication Date	Name of Patentee or	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
lnitials*		No.' Number-Kind Code <sup>2 (If Known)</sup> MM-DD-1		MM-DD-YYYY	
INM	USI	3,839,678	10-01-1974	Bell	
	US2	5,276,706	01-04-1994	Critchlow	
	US3	5,533,004	07-02-1996	Jasper et al.	<u> </u>
$\neg$	US4	5,553,064	09-03-1996	Paff et al.	
	USS	5,612,975	03-18-1997	Becker et al.	
	US6	5,703,539	12-30-1997	Gillig et al.	
	US7	5,859,671	01-12-1999	Kim	
	US8	5,903,231	05-11-1999	Emelko	
	US9	6,005,854	12-21-1999	Xu et al.	
	US10	6,028,860	02-22-2000	Laubach et al.	
	US11	6,055,242	04-25-2000	Doshi et al.	
	US12	6,215,792 B1	04-10-2001	Abi-Nassif	
	US13	6,298,098 B1	10-02-2001	Krasner et al.	
	US14	6,353,604 B2	03-05-2002	Grimwood et al.	
	US15	6,459,703 B1	10-01-2002	Grimwood et al.	
	US16	6,529,520 B1	03-04-2003	Lee et al.	
1	US17	6,546,017 B1	04-08-2003	Khaunte	
	US18	6,563,829 B1	05-13-2003	Lyles et al.	
$\sqrt{I}$	US19	6,614,799 B1	09-02-2003	Gummalla et al.	
<b>A</b>	US20	6,647,069 B1	11-11-2003	Segal et al.	

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Examiner Initials*	Cite No.	ite Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
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INM	FPI	WO 98/47236 A1	10-22-1998	Eng		
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Signature	/lan moore/	Considered	

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## SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete Complete	if Known	
Application Number	09/780,179	
Filing Date	February 9, 2001	
First Named Inventor	Thomas J. QUIGLEY	
Art Unit	2661	
Examiner Name	Ian N. Moore	
Attorney Docket Number	1875.132000I	

			U.S. PATENT DO	CUMENTS	
Examiner Initials	Cite No.1	Document Number Number-Kind Code <sup>2 (If Known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
INM	US21	6,647,070 B1	11-11-2003	Shalvi et al.	
1	US22	6,650,624 B1	11-18-2003	Quigley et al.	
	US23	6,650,698 B1	11-18-2003	Liau et al.	
	US24	6,704,932 B1	03-09-2004	Matsunaga et al.	
	US25	6,785,252 B1	08-31-2004	Zimmerman et al.	
1/	US26	6,961,314 B1	11-01-2005	Quigley et al.	
lacksquare	US27	6,965,616 B1	11-15-2005	Quigley et al.	
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			FOREIGN PATENT DO	CUMENTS		
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code* Number* Kind Code* (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
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Examiner		Date	
Signature	/Ian Moore/	Considered	06/08/2006

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